



Philosophical Transactions

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An Account of a small Tract, entitled,
 THOMÆ HOBBS *Quadratura Circuli, Cubatio Sphæra, Du-*
plicatio Cubi, (secundò Edita,) Denuò Refutata, Auth.
 JOH. WALLIS. S. T. D. *Geom. Prof. Saviliano.*
Oxonie, 1669.

Since Mr. Hobbs thought himself obliged to make some Reply to Dr Wallis's confutation of what he had, not long since, publish't upon this Argument; Dr. Wallis made no stay at all to return this Answer and second refutation. Concerning which we shall give you a brief account, suggested by Dr. Wallis himself, of Mr. Hobbs's fundamental mistake in his late Quadrature of the Circle, referring the Reader to the Tract itself for the Figure, which is therein the first.

Mr. Hobbs, considering, That, in case it should happen so luckily (which was not necessary) that QY (the base of a right-angled Triangle QYA equal to the Sector LCA , and consequently the Square $QRST$ equal to the Circle $BCDE$,) should, by the Arch CL , be cut just in the midst at P ; then would, not only (which to his purpose was necessary) QPL , CPY , be equal each to other (because of $ALPY$ common both to the Triangle and the Sector;) but more-over (which was not necessary) each of them equal to the half of PAV , (supposing CAV taken equal, by construction, to LAP :) all which is true, in case of such a lucky hap:

And finding then (which is true also) that this could not All happen, unless that intersection at P , were in the line AO (drawn from the Center A to the middle of CG ,) because this must needs pass through the middle of QY .

Concluded, That it must needs so happen, or else it was impossible for Any right-angled Triangle, as QYA (like to, and part of GCA ,) to be equal to the Sector LCA : because, in any other, as qyA , the intersection of CL and qy at p , would not be just in the midst of qy ; and therefore (which he supposed necessary, but was not) qpA not just the halfe of qyA .

Not considering (which is his fundamental mistake) that, if qPL and CPY be equal each to other (though neither of them be equal

equal to the halfe of PAV , or of pAv ; nor yet qp equal to the halfe of qy , nor qpA to the halfe of qyA ; (*the Triangle qyA will be equal to the Sector LCA (because $ALpy$ is common to both;) and like to the Triangle GCA , and a part of it;* which he thought to have been impossible.

Note

WHat in N°. 54. p. 1077. in the *Answ. to Qu. 1.* is said of the Observation of *Briners*, is to be understood, that the Workmen *think* so, that they make more Salt with the same quantity of brine, at the Full Moon, then at other times, though really they do not, as the Answerer Judgeth by his *Observ.* in N°. 53. p. 1064: Who hath since advertis'd, that 'tis possible at times, when the Pit hath been much drawn first, that then, if without intermission they go on *walling* till the *Full*, they may make at that time more Salt, than at another time, it being well known, that much drawing the Pit, strengthens the Brine.

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